

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A failure prediction system comprising:

multiple devices; and

a device management server managing the multiple devices via a network;

wherein each of the multiple devices includes a device diagnosis section for diagnosing a state of the device and to send first diagnosis results obtained by the diagnosing diagnosis to the device management server; and

the device management server includes a failure prediction section for recognizing a state related to a failure based on the first diagnosis results sent by the device diagnosis section of each of the devices, performing failure diagnosis as for the recognized state related to a failure, and predicting a device with a failure tendency based on second diagnosis results obtained by the failure diagnosis;

the device diagnosis section of the device comprising:

a communication part for communicating with the device management server;

a program execution part for executing first and second diagnosis programs for diagnosing the state of parts of the device;

a storage part for preserving settings of the first and second diagnosis programs and the first and second diagnosis results; and

a detection part for detecting the state of parts of the device.

2-3. (Cancelled)

4. (Original) The failure prediction system according to claim 1 wherein the failure prediction section of the device management server comprises:

a communication part for communicating with the device;

a data processing part for creating failure occurrence tendency information showing a tendency of a state related to a failure based on the first diagnosis results sent by each of the devices and creating the second diagnosis program;

a storage part for storing the information on the device and the diagnosis results;
and

a search part for searching for a device corresponding to the failure occurrence tendency information.

5. (Original) The failure prediction system according to claim 1 wherein each of the devices comprises an operation restriction section for restricting a part or all of operations of the device in response to a signal from the device management server.

6. (Original) The failure prediction system according to claim 1 wherein each of the devices comprises a warning section for giving a warning that at least one of a failure of the device is predicted and operations are restricted, in response to a signal from the device management server.

7. (Original) The failure prediction system according to claim 1 wherein the device comprises a printer.

8. (Original) The failure prediction system according to claim 1 wherein the diagnosis by each of the devices of the state of the device is periodically performed.

9. (Original) The failure prediction system according to claim 1 wherein the diagnosis by each of the devices of the state of the device is performed when an event occurs.

10. (Original) The failure prediction system according to claim 1 wherein the notification by each of the devices of the results of diagnosis of the state of the device to the device management server is periodically performed.

11. (Original) The failure prediction system according to claim 1 wherein the detection of a state related to a failure by the failure prediction section of the device management server is performed based on a process leading to a failure of the device.

12-16. (Cancelled)

17. (Currently Amended) A computer-readable media for storing a failure prediction program for realizing a failure prediction system comprising:

multiple devices; and

a device management server for managing the multiple devices via a network with a computer;

wherein each of the multiple devices includes a device diagnosis section for diagnosing a state of the device and to send first diagnosis results obtained by the ~~diagnosis~~diagnosing to the device management server; and

the device management server includes a failure prediction section for recognizing a state related to a failure based on the first diagnosis results sent by the device diagnosis section of each of the devices, performing failure diagnosis as for the recognized state related to a failure, and predicting a device with a failure tendency based on second diagnosis results obtained by the failure diagnosis;

the device diagnosis section of the device comprising:

a communication part for communicating with the device management server;

a program execution part for executing first and second diagnosis programs for diagnosing the state of parts of the device;

a storage part for preserving the settings of the first and second diagnosis programs and the first and second diagnosis results; and

a detection part for detecting the state of parts of the device.

18-19. (Cancelled)

20. (Currently Amended) The computer-readable media for storing the ~~The~~ failure prediction program according to claim 17 wherein the failure prediction section of the device management server comprises:

a communication part for communicating with the device;

a data processing part for creating failure occurrence tendency information based on the diagnosis results sent by each of the devices and creating the second diagnosis program;

a storage part for storing the information on the device and the diagnosis results;
and

a search part for searching for a device corresponding to the failure occurrence tendency information.

21. (Currently Amended) A failure prediction method comprising:

diagnosing ~~the~~ a state of multiple devices connected to a network;

recognizing a state related to a failure based on first diagnosis results of the ~~diagnosis~~ diagnosing of the multiple devices;

performing failure diagnosis as for the state related to a failure; and

predicting a device with a failure tendency based on second diagnosis results obtained by the failure diagnosis ~~results~~;

the diagnosing of the state of multiple devices comprising in each device:

communicating with a device management server;

executing first and second diagnosis programs for diagnosing the state of
parts of the device;

storing settings of the first and second diagnosis programs and the first
and second diagnosis results; and
detecting the state of parts of the device.

22. (Cancelled)

23. (Original) The failure prediction method according to claim 21 wherein when a device with a failure tendency is predicted, at least one of the following occurs:
operations of the device with a failure tendency are stopped; and
a warning is given to the user of the device after the prediction.

24. (Original) The failure prediction method according to claim 21 wherein the diagnosis by each of the devices of the state of the device is periodically performed.

25. (Original) The failure prediction method according to claim 21 wherein the diagnosis by each of the devices of the state of the device is performed when an event occurs.

26. (Original) The failure prediction method according to claim 21 wherein the notification by each of the devices of the results of diagnosis of the state of the device is periodically performed.

27. (Original) The failure prediction method according to claim 21 wherein the detection of a state related to a failure by the failure prediction section of the device management server is performed based on a process leading to a failure of the device.